

WHAT IS CLAIMED IS:

1. A projector that is capable of correcting an image distortion due to off-axis projection of an image in a horizontal direction and in a vertical
5 direction onto a screen, the projector comprising:

an image distortion adjustment module that adjusts a display video signal, which represents an image to be projected by the projector, according to values of a horizontal correction parameter used for correcting an image distortion in the horizontal direction and a vertical correction parameter
10 used for correcting an image distortion in the vertical direction, so as to correct an image distortion arising in at least one of the horizontal direction and the vertical direction;

a two-dimensional input unit that outputs a two-dimensional operation signal, which is mapped to the horizontal correction parameter
15 and to the vertical correction parameter, in response to a user's operation; and

a parameter setting module that sets the values of the horizontal correction parameter and the vertical correction parameter in the image distortion adjustment module in response to the two-dimensional operation
20 signal.

2. A projector in accordance with claim 1, wherein the parameter setting module varies the values of the horizontal correction parameter and the vertical correction parameter according to a duration of the
25 two-dimensional operation signal output from the two-dimensional input unit.

3. A projector in accordance with claim 1, the projector further comprising:

5 a distortion correction window generation module that simultaneously displays an indicator representing a quantity of adjustment of the image distortion in the horizontal direction and an indicator representing a quantity of adjustment of the image distortion in the vertical direction, which depend upon the horizontal correction parameter and the vertical correction parameter set in response to the two-dimensional
10 operation signal.

4. A projector that is capable of correcting an image distortion due to off-axis projection of an image in a horizontal direction and in a vertical direction onto a screen, the projector comprising:

15 a projection unit that projects an image;
a menu window generation module that displays a menu option window in response to a user's instruction;

a selection setting module that selects a desired menu on the displayed menu option window in response to a user's instruction;

20 a distortion correction window generation module that simultaneously displays an indicator representing a quantity of correction of an image distortion in the horizontal direction and an indicator representing a quantity of correction of an image distortion in the vertical direction, when an image distortion correction process is selected on the displayed menu
25 option window and starts;

an image distortion adjustment module that corrects an image

distortion with user's settings on the quantity of correction of the image distortion in the horizontal direction and the quantity of correction of the image distortion in the vertical direction; and

an image distortion correction termination module that terminates
5 the image distortion correction process in response to a user's instruction.

5. A method of correcting an image distortion in a projector through
a user's operation of a two-dimensional input unit, where the image
distortion occurs in off-axis projection of an image in a horizontal direction
10 and in a vertical direction from the projector onto a screen, the method
comprising the steps of:

specifying values of a horizontal correction parameter used for
correction of an image distortion in the horizontal direction and a vertical
correction parameter used for correction of an image distortion in the
15 vertical direction, in response to a two-dimensional operation signal output
from the two-dimensional input unit; and

adjusting a display video signal, which represents an image to be
projected by the projector, according to the specified values of the horizontal
correction parameter and the vertical correction parameter.

20

6. A method of correcting an image distortion in a projector due to
off-axis projection of an image in a horizontal direction and in a vertical
direction onto a screen, the method comprising the steps of:

displaying a menu option window in response to a user's instruction;
25 simultaneously displaying an indicator representing a quantity of
correction of an image distortion in the horizontal direction and an indicator

representing a quantity of correction of an image distortion in the vertical direction, when an image distortion correction process is selected on the displayed menu option window in response to a user's instruction and starts;

- 5 correcting an image distortion with user's settings on the quantity of correction of the image distortion in the horizontal direction and the quantity of correction of the image distortion in the vertical direction; and

 terminating the image distortion correction process in response to a user's instruction.

10